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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|---|-------------|----------------------|-------------------------|-----------------|
| 10/669,977  | 09/24/2003  | Yeping Cai           | P-1111 B                | 4882            |
| 7590 08/08/2005   |             |                      | EXAMINER                |                 |
| Scott R. Cox  |             |                      | JOHNSON, CHRISTINA ANN  |                 |
| Lynch, Cox, Gilman & Mahan, PSC 500 W. Jefferson Street |             |                      | ART UNIT PAPER NUMBER   |                 |
| Suite 2100  |             |                      | 1725                    |                 |
| Louisville, KY  | 40202       |                      | DATE MAILED: 08/08/2005 |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s) |  |  |  |  |
|---|-------------------|--------------|--|--|--|--|
| ·   | 10/669,977        | CAI ET AL.   |  |  |  |  |
| Office Action Summary   | Examiner          | Art Unit     |  |  |  |  |
|   | Christina Johnson | 1725         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                   |              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                   |              |  |  |  |  |
| Status  |                   |              |  |  |  |  |
| 1) Responsive to communication(s) filed on 24 September 2003.   |                   |              |  |  |  |  |
|   | · ·               |              |  |  |  |  |
| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |                   |              |  |  |  |  |
| Disposition of Claims   |                   |              |  |  |  |  |
| <ul> <li>4)  Claim(s) 1-21 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-21 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |                   |              |  |  |  |  |
| Application Papers  |                   |              |  |  |  |  |
| 9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 24 September 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                   |              |  |  |  |  |
| Priority under 35 U.S.C. § 119  |                   |              |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.   |                   |              |  |  |  |  |
| Attachment(s)   |                   |              |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 4/30/04; 12/19/03.  S Patent and Trademat Office.   |                   |              |  |  |  |  |

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### **DETAILED ACTION**

## Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Shikada et al.

Shikada et al. (US 6,147,125) discloses a process for preparation of a catalyst useful as a water gas shift catalyst and a methanol synthesis compound (column 2, lines 30-68). The reference teaches a procedure in which nitrates of copper, aluminum, zinc are mixed with alumina in the presence of water, and a material is precipitated out, which is subsequently dried and molded into a catalytic entity (Columns 9-10, lines 48-67 and 1-8). The temperature and pH at which the process should be maintained are given as about 80°C and 8.0 respectively. The catalyst composition may further contain potassium (Column 22, lines 1-4). The amounts of materials taught by the reference would meet the instantly claimed amounts. Refer to Examples.

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Shikada et al.

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### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 11-21 are rejected under 35 U.S.C. 103(a) as unpatentable over Shikada et al. as applied above for claims 1-10.

The teachings of Shikada et al. are as described above for claims 1-10.

The difference between Shikada et al. and the instant claims is that the reference does not teach the required order of mixing. It has been held that the selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results (see *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946)) and also that the selection of any order of mixing ingredients is prima facie obvious (see *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930)).

Since the only difference is the order of mixing ingredients, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the altered sequence of mixing ingredients since the selection of any modified order of mixing ingredients is a prima facie case of obviousness.

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### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Johnson, whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday to Friday, 7:30-5, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn, can be reached at (571) 272-1171. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-diret.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christina Johnson Patent Examiner Art Unit 1725

CAJ August 2, 2005